



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/015,287 01/29/98 NOZAKI

K 980055

EXAMINER

IM22/0824

CHU, J

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MCLELAND AND NAUGHTON
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WASHINGTON DC 20006

ART UNIT

PAPER NUMBER

1752

DATE MAILED:

08/24/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/015,287

Applicant(s)

NOZAKI et al

Examiner

John Chu

Group Art Unit

1752



☒ Responsive to communication(s) filed on Jun 21, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-23 is/are pending in the application.

Of the above, claim(s) 18-23 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-17 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

This Office action is in response to the response filed June 21, 1999.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 and 14 of copending Application No. 09/080,530. Although the conflicting claims are not identical, they are not patentably distinct from each other because the recited acid polymer includes the transition phrase of "comprising" which includes other ingredients such as photoacid generators. Secondly the recited resist composition includes similar protective side groups, namely butyrolactone. A patent to either of

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the applications would extend the grant to one of the applications and would also in fact be patenting obvious inventions..

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP-09-090637 (Nozaki et al).

The claimed invention is drawn to an acid sensitive polymer comprising a film-forming polymer a carboxyl group bonding to a side chain of said polymer main chain, said carboxyl group having a protective group of the lactone structure represented in claim 1 and an additional acidic functional group bonding to a side chain of said polymer main chain., said acidic functional group having an acid-cleavable protective group

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The claims are further directed to a resist composition comprising a polymer as recited in claim 1 and a photoacid generator.

Nozaki et al discloses a photoresist composition comprising a resin having a lactone as a residue in an acrylate monomer with an acid generating compound. The examples disclose butyrolactone on the monomeric group which is similar to the claimed scope, see pages 5 and 6.

Nozaki et al lacks the isomeric lactone compounds recited in dependent claims 1 and 8 as claimed.

It would have been *prima facie* obvious to one of ordinary skill in the art of chemically amplified resist compositions to use isomeric lactone groups in place of the lactone group in Nozaki et al and reasonably expect same or results because the isomers are equivalent groups and the skilled artisan would expect same or similar results for the photolithographic properties as recited in Nozaki et al. Motivation is based on the desire to have an acid cleavable polymer which is aqueous alkaline soluble upon exposure to actinic radiation with the reasonable expectation of having the same results from the isomeric compounds.

The arguments by applicant have been noted, however there is no comparison distinguishing the isomeric lactone groups on the polymer, accordingly the rejection is repeated.

New grounds of rejection have been made, so the rejection is not made Final.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (703) 308-2298. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

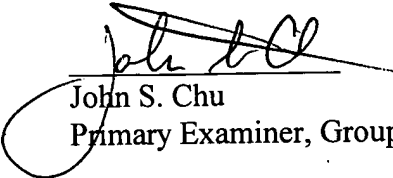
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The fax phone number for this Group is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



John S. Chu

Primary Examiner, Group 1700

J.Chu

August 24, 1999